

USGS-NPS Vegetation Mapping Program
Effigy Mounds National Monument

***Schoenoplectus tabernaemontani* - *Typha* spp. - (*Sparganium* spp., *Juncus* spp.) Herbaceous Vegetation**

COMMON NAME	Softstem Bulrush - Cattail species - (Bur-reed species, Rush species) Herbaceous Vegetation
SYNONYM	Bulrush - Cattail - Burreed Shallow Marsh
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural Temperate or subpolar grassland (V.A.5.N)
FORMATION	Seasonally flooded temperate or subpolar grassland (V.A.5.N.k)
ALLIANCE	TYPHA SPP. - (SCHOENOPECTUS SPP., JUNCUS SPP.) SEASONALLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM Seasonally flooded temperate or subpolar grassland

CONCEPT SUMMARY

Globally

This shallow marsh mixed emergent community ranges broadly over the midwestern United States and adjacent Canada. It is found in basin-like depressions, backwater areas of floodplains, and shallow margins of lakes or ponds. Soils are shallow to deep, very poorly drained, consisting of peats, mucks, or mineral materials, often found in alluvium. Vegetation varies from zones dominated by tall emergents 1–2 m tall to those with hydrophytic annual and perennial forbs <1 m tall. In the tall emergent zone, *Schoenoplectus tabernaemontani* (= *Scirpus tabernaemontani*), *Schoenoplectus fluviatilis* (= *Scirpus fluviatilis*), *Schoenoplectus acutus* (= *Scirpus acutus*), *Typha angustifolia*, and *Typha latifolia* may dominate, mixed with a variety of other herbaceous species, such as *Leersia oryzoides*, *Eleocharis palustris*, *Juncus* spp., and *Sparganium* spp. The hydrophytic annual and perennial forb zone is dominated by *Alisma subcordatum*, *Alisma plantago-aquatica*, *Sagittaria latifolia*, *Sparganium eurycarpum*, *Pontederia cordata*, along with *Bacopa rotundifolia* and *Heteranthera limosa*. Occasional floating-leaved aquatics are sometimes present, including *Azolla caroliniana*, *Lemna* spp., *Spirodela polyrrhiza*, and *Utricularia macrorrhiza*.

RANGE

Effigy Mounds National Monument

This community occurs along ponds within the Monument and in backwaters of the nearby backwaters of the Mississippi River.

Globally

This shallow marsh mixed emergent community ranges broadly over the midwestern United States and adjacent Canada, from Ohio and Ontario west to Manitoba, south to Oklahoma, and east to Indiana.

ENVIRONMENTAL DESCRIPTION

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This community is found along shallow margins of ponds, and in shallow backwaters of the Mississippi River. The substrate is muck and water depth is less than 1 meter. *Sparganium eurycarpum*, may form monospecific stands.

Globally

This community ranges broadly over the midwestern United States. It is found in basin-like depressions, backwater areas of floodplains and shallow margins of lakes or ponds. Soils are shallow to deep, very poorly drained, consisting of peats, mucks, or mineral materials, often found in alluvium (Lauver et al. 1999).

MOST ABUNDANT SPECIES

Effigy Mounds National Monument

<u>Stratum</u>	<u>Species</u>
FORB	<i>Sparganium eurycarpum</i>

Globally

<u>Stratum</u>	<u>Species</u>
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CHARACTERISTIC SPECIES

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Sparganium eurycarpum

Globally

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VEGETATION DESCRIPTION

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Sparganium eurycarpum forms a near monospecific stand. Other herbaceous species present may include *Scirpus validus* and *Polygonum coccineum*. Where open patches of water exist, submersed aquatic plants and *Lemna* spp occur. Submersed species include *Elodea canadensis*, narrow-leaved pondweeds (*Potamogeton* spp.), and *Lemna* spp (*trisulca*, *minor*).

Globally

Vegetation varies from zones dominated by tall emergents 1–2 m tall to those with hydrophytic annual and perennial forbs <1 m tall. In the tall emergent zone, *Schoenoplectus tabernaemontani* (= *Scirpus tabernaemontani*), *Schoenoplectus fluviatilis* (= *Scirpus fluviatilis*), *Schoenoplectus acutus* (= *Scirpus acutus*), *Typha angustifolia*, and *Typha latifolia* may dominate, mixed with a variety of other herbaceous species, such as *Leersia oryzoides*, *Eleocharis palustris*, *Juncus* spp., and *Sparganium* spp. The hydrophytic annual and perennial forb zone is dominated by *Alisma subcordatum*, *Alisma plantago-aquatica*, *Pontederia cordata*, *Sagittaria latifolia*, and *Sparganium eurycarpum*, along with *Bacopa rotundifolia* and *Heteranthera limosa*. Other species that may dominate locally include *Polygonum pennsylvanicum* (= *Polygonum bicornis*), *Polygonum amphibium* var. *emersum* (= *Polygonum coccineum*), and *Polygonum lapathifolium*. Occasional floating-leaved aquatics are sometimes present, including *Azolla caroliniana*, *Lemna* spp., *Spirodela polyrrhiza*, and *Utricularia macrorhiza* (Eggers and Reed 1987, Steinauer and Rolfsmeier 2000).

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G4G5.

DATABASE CODE CEGLO02026

COMMENTS

Effigy Mounds National Monument

This is a rare community type within the Monument, but is common in backwaters of the Mississippi River.

Globally

REFERENCES

- Baalman, R. J. 1965. Vegetation of the Salt Plains National Wildlife Refuge, Jet, Oklahoma. Unpublished Ph.D. dissertation, University of Oklahoma, Norman.
- Eggers, S. D., and D. M. Reed. 1987. Wetland plants and plant communities of Minnesota and Wisconsin. U.S. Army Corps of Engineers, St. Paul District, St. Paul, MN. 201 pp.
- Hoagland, B. 2000. The vegetation of Oklahoma: A classification for landscape mapping and conservation planning. The Southwestern Naturalist 45(4):385–420.
- Hoagland, B. W. 1997. Preliminary plant community classification for Oklahoma. Unpublished draft document, version 35629. University of Oklahoma, Oklahoma Natural Heritage Inventory, Norman. 47 pp.
- Kartesz, J. T. 1999. A synonymized checklist and atlas with biological attributes for the vascular flora of the United States, Canada, and Greenland. First edition. In: J. T. Kartesz and C. A. Meacham. Synthesis of the North American Flora, Version 1.0. North Carolina Botanical Garden, Chapel Hill, NC.
- Lauver, C. L., K. Kindscher, D. Faber-Langendoen, and R. Schneider. 1999. A classification of the natural vegetation of Kansas. The Southwestern Naturalist 44:421–443.
- Lee, H., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig, and S. McMurray. 1998. Ecological land classification for southern Ontario: First approximation and its application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Steinauer, G., and S. Rolfsmeier. 2000. Terrestrial natural communities of Nebraska. Unpublished report of the Nebraska Game and Parks Commission. Lincoln, NE. 143 pp.